Gulf of Mexico Harmful Algal Bloom Bulletin

22 March 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: March 19, 2007

Conditions Report

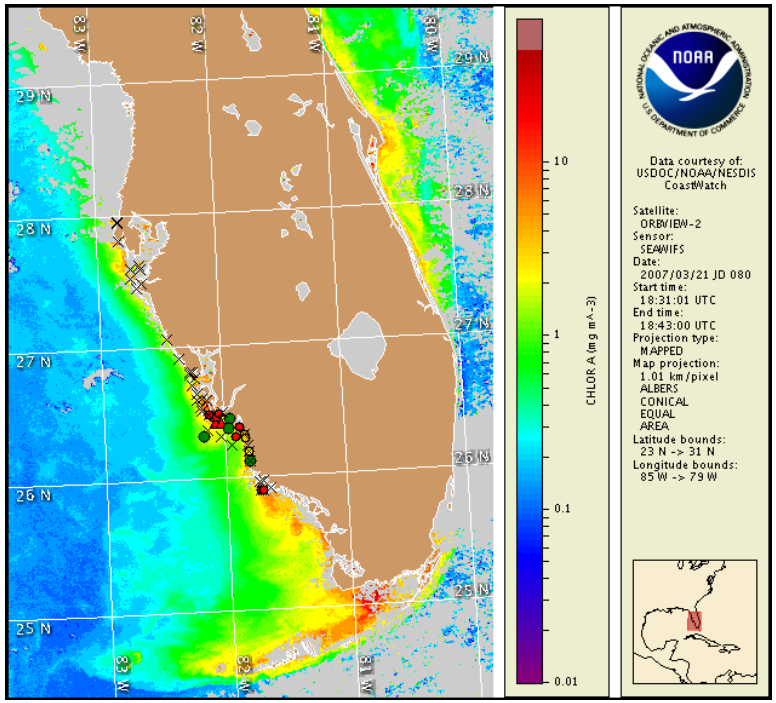
A harmful algal bloom has been identified in patches from southern Lee to central Collier Counties. In southern Lee County, patchy moderate impacts are possible today through Sunday. In northern and central Collier County, patchy very low impacts are possible today through Sunday.

Analysis

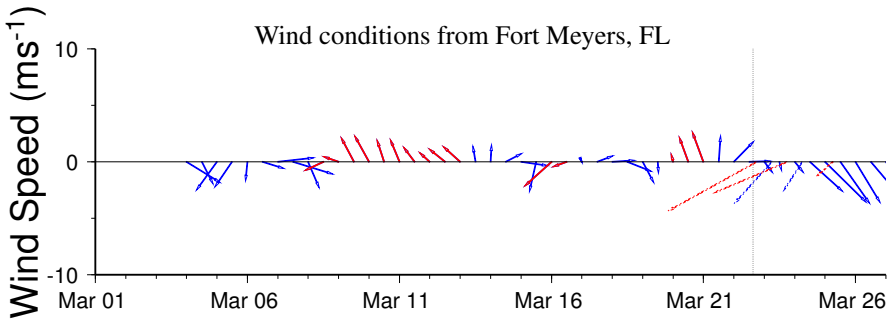
The harmful algal bloom persists from southern Lee to central Collier Counties. Satellite imagery indicates the persistance of a slightly elevated chlorophyll patch (generally <3 μg/L) up to 9 miles south to southeast of Sanibel Island and alongshore (up to 5 μg/L) from Fort Myers to Cape Romano. Chlorophyll levels have increased slightly (generally ~3 μg/L) alongshore of northern and central Collier County. Elevated patches are located 5 miles offshore of Naples and 11 miles south of Cape Romano (up to 5 μg/L). Recent samples identified "low a" concentrations of *Karenia brevis* in central Collier County (FWRI, 3/19). Continued sampling is recommended. Reports of dead fish have been received from Fort Myers and Naples, along with reports of respiratory irritation in the Naples area. Westerly transport of the bloom through Sunday is possible. Forecasted winds are favorable for upwelling and may intensify bloom.

No recent samples have been received from the Lower Florida Keys. Patches of previously elevated chlorophyll have decreased in overall concentration (generally ~3 μg/L) west of the Lower Keys. Strong winds through Thursday favor westward transport.

~Fenstermacher, Urizar



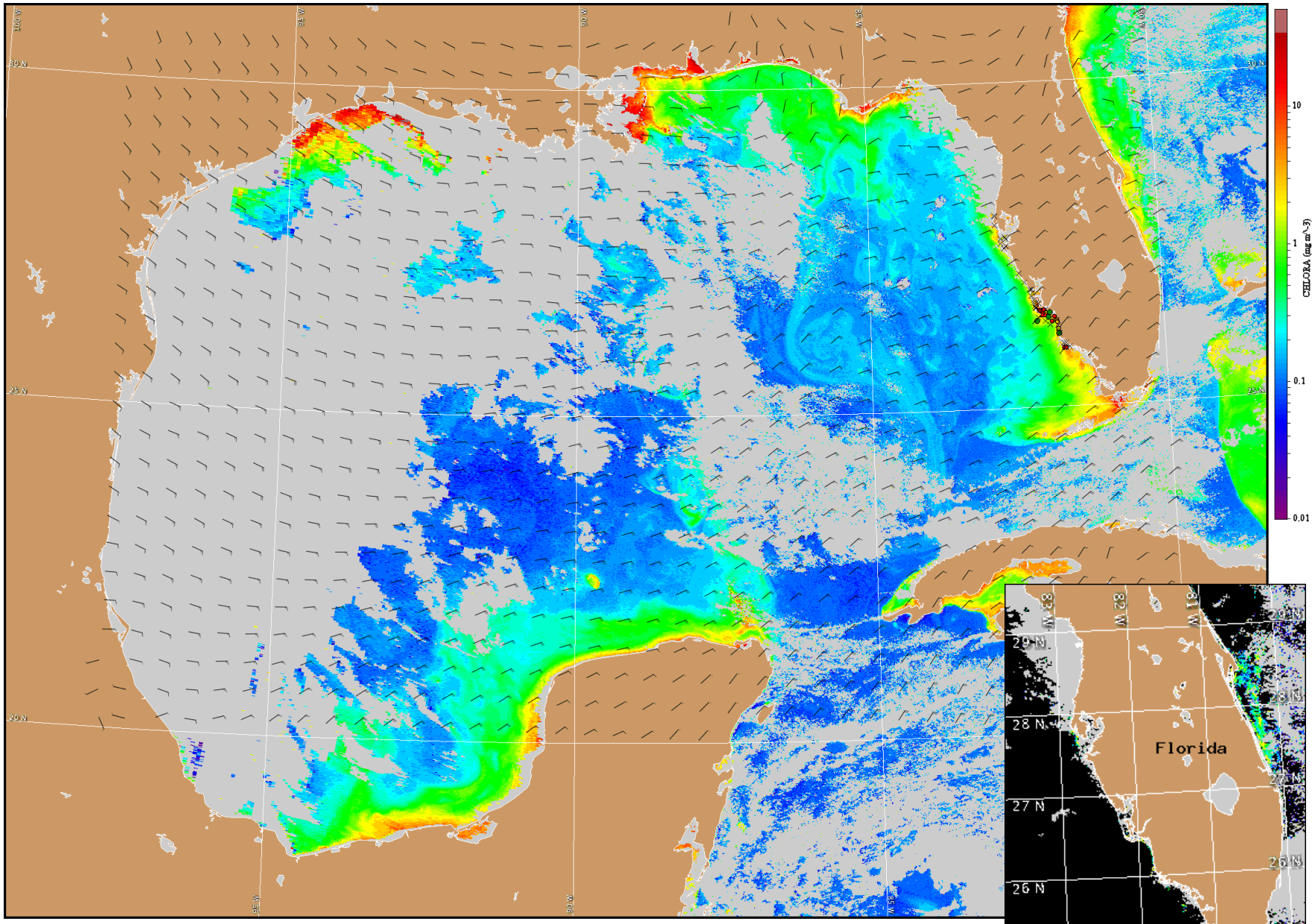
Satellite chlorophyll image with possible HAB areas shown by red polygon(s).Cell concentration sampling data from March 12-21 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the the HABFS bulletin guide: http://www.csc.noaa/gov/crs/habf/habfs_bulletin_guide.pdf



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

SW Florida: Northeasterlies today through Saturday, becoming easterly on Saturday night and Sunday (10-15 knts; 5-8 m/s).

Keys: Northeasterlies to easterlies today through Friday followed by easterlies on Saturday and Sunday (15-20 knts; 8-10 m/s).



Satellite chlorophyll image and forecast winds for March 23, 2007 06Z with cell concentration sampling data from March 12-21 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the the HABFS bulletin guide: http://www.csc.noaa/gov/crs/habf/habfs_bulletin_guide.pdf

Verifi ed HAB areas shown in red. Other bloom areas shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Vaca Key, FL